

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
30/2004	Hiroyuki Otsuka	NT-US045041	3178
22919 7590 08/28/2006 GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700		EXAMINER	
		PILKINGTON, JAMES  ART UNIT PAPER NUMBER	
	08/28/2006 ELORS, LLP V, SUITE 700	08/28/2006 ELORS, LLP V, SUITE 700	08/28/2006 EXAM ELORS, LLP PILKINGTO V, SUITE 700

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/811,914	OTSUKA, HIROYUKI		
Office Action Summary	Examiner	Art Unit		
·	James Pilkington	3682		
The MAILING DATE of this communication app				
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONEI	the mailing date of this communication.  O (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 14 Ju	<u>ine 2004</u> .			
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) ⊠ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-20 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.			
Application Papers		·		
9) The specification is objected to by the Examine		_		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/14/04.	4)			
· apor mojojiman bato <u>w 19709</u> .	٠, ٢, ٥,,,٠,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

Art Unit: 3682

#### **DETAILED ACTION**

#### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the hand operating means, the manual shift means, the shift position retaining means, the manual shift selecting means and the automatic transmission shift means must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

Claim 10 objected to because of the following informalities: lines 2-3 of the clm reads "coupled move to a movable" the examiner believes this should be - - coupled to a moveable - -. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- What are the hand operating means? Where are they located in the apparatus? Does the applicant mean the knob on the shift lever, the shift lever or the buttons to actuate the automatic and manual portions of the device?
- What are the manual shift means? Where are they located in the apparatus? Does the applicant mean the sensors for detecting the upshift and down-shift or does the applicant mean the push button to actuate the manual portion of the device?

 What are the shift position retaining means? Where are they located in the apparatus? Does the applicant mean the detent pin, the shift gate, the detent spring or the detent plate?

 (clm 20 only) What are the manual shift selecting means and the automatic transmission shift means?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 recites the limitation "the detent spring" in last line of the clm. There is insufficient antecedent basis for this limitation in the claim.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 1, 2, 7-11, 14, 15, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jezewski, USP 6,568,294 B2 (originally published as PG Pub 2001/0032524 A1 on October 25, 2001).

Re clm 1, Jezewski an inline automatic/manual shifter comprising:

Art Unit: 3682

 A shift lever (10/13) configured and arranged to selectively move in a straight line path to select one of a park position (P), a neutral position (N), a reverse position (R), and a drive position (D)

- A manual up-shift switch and a manual down-shift switch (133, one half detects up shift while the other half detects down shift)
- A manual shift selector (101)
- A shift position retaining mechanism including a detent spring (115) fixed to move with the shift lever (10/13) (moves in and out) and a shift position retaining element (114, See Figure 6) with a park position notch, a neutral position notch, a reverse position notch and a drive position notch (see Figure 1), the detent spring (115) being configured and arranged to selectively engage the notches of the shift position retaining element (114) to selectively retain the shift lever in one of the park position, the neutral position, the reverse position and the drive position
- The drive position notch being configured and arranged to form an up-shift switch ramp surface (towards neutral) and a down-shift switch ramp surface (towards "-") with a center neutral drive location located between the up-shift and down-shift ramp surfaces (drive position)
- The up-shift and down-shift switch ramp surfaces being configured and arranged such that the detent spring (115) applies an urging force on the drive position notch to bias the detent spring to the center neutral drive location, the up-shift and down-shift switch ramp surfaces being further

configured and arranged such that the manual up-shift switch is operated when the detent spring (115) is moved along the up-shift switch ramp surface and the manual down-shift switch is operated when the detent spring is moved along the down-shift switch ramp surface.

Re clm 2, the shift lever (10/13) includes a movable detent pin (99) arranged to selectively engage a stationary shift plate (90) to prevent the shift lever from shifting from the drive position to one of the other operating positions.

Re clms 7 and 11, an automatic transmission shift plate (93) configured and arranged to be selectively engaged and disengaged by the detent pin (99) (engaged when moving, disengaged when in an operating position) such that the shift lever (10/13) moves with the automatic transmission shift plate (93) when the detent pin (99) is engaged wit the automatic transmission shift plate (93) and the shift lever moves independently of the automatic transmission shift plate (93) when the detent pin is disengaged with the automatic transmission shift plate (93).

Re clm 8, the shift lever (10/13) includes an automatic shift selector (16, see Figure 2) located on an upper portion of the shift lever with the automatic shift selector being operatively coupled to the detent pin (99).

Re clm 9, the manual shift selector (101) is located on an upper portion of the shift lever (see Figure 1).

Re clm 10, the shift lever (10/13) includes an automatic shift selector (16, see Figure 2) being operatively coupled to a movable detent pin (99) that engages a stationary shift plate (90) to limit the movement of the shift lever (10/13)

Art Unit: 3682

Re clm 14, Jezewski an inline automatic/manual shifter comprising:

 A shift lever (10/13) configured and arranged to selectively move in a straight line path to select one of a park position (P), a neutral position (N), a reverse position (R), and a drive position (D)

- A manual up-shift switch and a manual down-shift switch (133, one half detects up shift while the other half detects down shift)
- A manual shift selector (101)
- A shift position retaining mechanism (detent spring 115) configured and arranged to selectively retain the shift lever (10/13) in one of the park position, the neutral position, the reverse position and the drive position
- A shift release device (button 16) coupled to the shift lever (10/13) to selectively lock the shift lever in the drive position and release the shift lever (10/13) for movement along the straight line path, the shift release device includes a detent pin (99) that engages a shift gate (78/79)
- an automatic transmission shift plate (93) configured and arranged to be selectively engaged and disengaged by the detent pin (99) (engaged when moving, disengaged when in an operating position) such that the shift lever (10/13) moves with the automatic transmission shift plate (93) when the detent pin (99) is engaged wit the automatic transmission shift plate (93) and the shift lever moves independently of the automatic

Art Unit: 3682

transmission shift plate (93) when the detent pin is disengaged with the automatic transmission shift plate (93).

Re clm 15, the automatic transmission shift plate (93) and the shift lever (10/13) are pivotally mounted about a pivot axis (112).

Re clm 17, the shift lever (10/13) includes an automatic shift selector (16, see Figure 2) located on an upper portion of the shift lever with the automatic shift selector being operatively coupled to the detent pin (99).

Re clm 18, the manual shift selector (101) is located on an upper portion of the shift lever (see Figure 1).

Re clm 19, as best understood, Jezewski an inline automatic/manual shifter comprising:

- hand operating means (10/13) for selectively move in a straight line path to select one of a park position (P), a neutral position (N), a reverse position (R), and a drive position (D)
- manual shifting means (133) for manually shifting gears of the automatic transmission in response to movement of the hand operating means (10/13)
- A shift position retaining means (detent spring and plate 115 and 93/114)
   for selectively retain the hand operating means (10/13) in one of the park position, the neutral position, the reverse position and the drive position, while allowing a manual shift movement of the hand operating means

Art Unit: 3682

along the straight line path from a central neutral location (D) of the drive position to a manual shift location (left or right side of D) of drive position while the hand operating means is in the drive position.

Page 9

• The shift position retaining means being configured to apply an urging force to bias the hand operating means to the center neutral drive location of the drive position when the hand operating means is moved to the manual shift location of the drive position on the drive position notch (D) to bias the detent spring (115) to the center neutral drive location

Re clm 20, as best understood, Jezewski an inline automatic/manual shifter comprising:

- hand operating means (10/13) for selectively move in a straight line path to select one of a park position (P), a neutral position (N), a reverse position (R), and a drive position (D)
- manual shifting means (133) for manually shifting gears of the automatic transmission in response to movement of the hand operating means (10/13)
- manual shift selecting means (101)
- shift position retaining means (detent spring and plate 115 and 93/114) for selectively retain the hand operating means (10/13) in one of the park position, the neutral position, the reverse position and the drive position, while allowing a manual shift movement of the hand operating means

Art Unit: 3682

along the straight line path from a central neutral location (D) of the drive position to a manual shift location (left or right side of D) of drive position while the hand operating means is in the drive position.

- Manually operated shift release means (button 16) the shift lever (10/13)
  to selectively lock the shift lever in the drive position and release the shift
  lever (10/13) for movement along the straight line path, the shift release
  device includes a detent means (99) that engages a shift gate (78/79)
- An automatic transmission shift means (93) for selecting an automatic transmission position in response to movement of the hand operating means
- the automatic transmission shift plate (93) configured to be selectively coupled to the hand operating means by the detent means (99) of the manually operated shift release means such that the hand operating means (10/13) moves with the automatic transmission shift plate (93) when the shift release means is engaged with the automatic transmission shift means (93) and the hand operating means moves independently of the automatic transmission shift plate (93) when the detent pin is disengaged with the automatic transmission shift plate (93).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3682

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-6, 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jezewski '294, in view of Miyoshi, USP 5,946,976.

Re clms 3, 12 and 16, Jezewski discloses all of the claimed subject matter as described above.

Jezewski does not disclose that the detent pin is configured and arranged to selectively actuate the manual up-shift and down-shift switches upon movement of the shift lever.

Miyoshi teaches a detent pin (21) is configured and arranged to selectively actuate (via 33) the manual up-shift and down-shift switches upon movement of the shift lever for the purpose of providing a shifting arrangement which is constructed by a reduced number of parts or elements (C2/L42-45).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Jezewski and provide a detent pin configured and arranged to selectively actuate the manual up-shift and down-shift switches upon movement of the shift lever, as taught by Miyoshi, for the purpose of providing a shifting arrangement which is constructed by a reduced number of parts or elements.

Re clm 4, Jezewski discloses an automatic transmission shift plate (93) configured and arranged to be selectively engaged and disengaged by the detent pin (99) (engaged when moving, disengaged when in an operating position) such that the shift lever (10/13) moves with the automatic transmission shift plate (93) when the detent pin (99) is engaged wit the automatic transmission shift plate (93) and the shift

Art Unit: 3682

lever moves independently of the automatic transmission shift plate (93) when the detent pin is disengaged with the automatic transmission shift plate (93).

Re clm 5, the automatic transmission shift plate (93) is pivotally mounted about a pivot axis (112).

Re clm 6, the shift lever (10/13) is pivotally mounted about the pivot axis (112) of the shift plate (93).

Re cm 13, the automatic shift plate (93) and the shift lever (10/13) are pivotally mounted about a pivot axis (112).

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP

JP

8/21/06

RICHARD RIDLEY SUPERVISORY PATENT EXAMINER